

SPEECH RECEIVING DEVICE AND VISEME EXTRACTION METHOD AND APPARATUS

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Abstract of the Disclosure

A technique for extracting visemes includes receiving successive frames of digitized analog speech information obtained from the speech signal at a fixed rate (210), filtering each of the successive frames of digitized analog speech information to synchronously generate time domain frame classification vectors at the fixed rate (215, 220, 225, 230, 235, 240), and analyzing each of the time domain classification vectors (250) to synchronously generate a set of visemes corresponding to each of the successive frames of digitized speech information at the fixed rate. Each of the time domain frame classification vectors is derived from one of the successive frames of digitized analog speech information. N multi-taper discrete prolate spheroid sequence basis (MTDPSSB) functions (220) that are factors of a Fredholm integral of the first kind may be used for the filtering, and the analyzing may use a spatial classification function (250). The latency is less than 100 milliseconds.